

ALBA 755, 855

Six valve, plus two rectifiers and tuning indicator, four wave-band superhet with 8 push-buttons utilising a mechanical system. In table (855) and radiogram (755) models and for 190-260 v. 40-100 cycle supplies. Made by A. J. Balcombe & Co., Ltd., 52-58, Tabernacle St., London, E.C.2.

Circuit.—Transformers couple the aerial to V1, the frequency-changer, on each of the four bands, there being a common primary for both M. & L.W. The oscillator section is straightforward with anode reaction coils on each band, and fixed padders on the two S.W. ranges. Trimmer-tuned iron-core transformers link V1 to V2, the I.F. amplifier, and V2 to V3, a

double-diode triode. A.V.C. elements are conventional, control being applied to V1 on M. and L.W. only.

Output of the signal demodulation diode is taken via a P.U. switch to the volume control, R.15. The triode section resistance-capacity feeds V4, an L.F. amplifier.

V4 has load resistors, R18 and R21, in both anode and cathode circuits and these develop opposite-phase signals which operate V5 and V6, the push-pull output pentodes, via C19 and C20. R20 biases V4.

R29 and R30 are grid leaks and R22 and R23 are oscillation stoppers. V5 and V6 energise a push-pull output transformer.

H.T. is obtained from a full-wave rectifier system which is perfectly normal, although a full-wave rectifier with strapped anodes is used for each half-wave (V7 and V8).

V9 is a "magic eye" tuning indicator operated from the A.V.C. line.

GANGING

I.F. CIRCUITS.—Inject 470 kc. to V1 grid and adjust I.F. trimmers for maximum, repeatedly reducing the input to keep below the level at which the A.V.C. begins to function.

M.W. BAND.—Tune to 250 m., inject this wavelength to aerial and adjust T1 and T2 for maximum.

Tune to 500 m., inject this wavelength and, rocking gang slightly, adjust T3.

L.W. BAND.—Tune to, and inject, 1,300 m. Adjust T4 and T5. Pad with T6 at 1,900 m.

S.W.1 BAND.—Tune to, and inject, 25 m. Adjust T7 and T8. Padding is fixed.

S.W.2 BAND.—Tune to, and inject, 50 m. Adjust T9 and T10. Padding is fixed.

WINDINGS

L	Ohms.	L	Ohms.
1	40	9	4
2	15	10	4
3	15	11	4
4	30	12	4
5	50	13	300
6	3	14	250
7	9	15	14
8	15	16	700

CONDENSERS

C	Mfds.	C	Mfds.
1	5 mmfds.	15	.005
2	.1	16	.25
3	25 mmfds.	17	.004
4	.1	18	.01
5	.1	19	.01
6	.0001	20	.01
7	.0002	21	16+16+8
8	.1	22	.05
9	75 mmfds.	23	.01
10	.1	24	.01
11	.1	25	.01
12	.1	26	.0036
13	.0001	27	600 mmfds.
14	.0001	28	300 mmfds.

VALVE READINGS

V	Type	Electrode	Volts	Ma.
1	ECH3	Anode	240	3.4
		Screen	90	3
		Osc. anode	90	5
2	EF9	Anode	246	3.5
		Screen	80	1.7
3	EBC3	Anode	150	2.4
4	EBC3	Anode	190	.4

Continued in end column

Although a large set, circuits of the 855 forward. The current output with phase in the use of two rectifier valve is the electron

Switching provides f and a pick-up po switch bank is utilis oscillator coils to effect

